



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,180	03/02/2004	Takeshi Arai	501.43537X00	3237
20457	7590	12/30/2009		
ANTONELLI, TERRY, STOUT & KRAUS, LLP			EXAMINER	
1300 NORTH SEVENTEENTH STREET			ZERVIGON, RUDY	
SUITE 1800			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22209-3873			1792	
			MAIL DATE	DELIVERY MODE
			12/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,180	Applicant(s) ARAI ET AL.
	Examiner Rudy Zervigon	Art Unit 1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 December 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 5,8,9,11-14,16,17 and 19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 5,8,9,11-14,16,17 and 19 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 02 March 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 5, 11, 12, 14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukazaki; Hisashi et al. (US 5837094 A) in view of Gupta; Anand et al. (US 6125789 A), Hamelin; Thomas et al. (US 6951821 B2) and Meder; Martin G. (US 6254689 B1). Tsukazaki teaches an apparatus (Figure 3; column 8, lines 10-67) for processing a sample (1, Figure 3; column 8, lines 10-67), comprising: a processing chamber (4,12, Figure 3; column 8, 8, lines 10-67) provided with a platform (2, Figure 3) on which the sample (1, Figure 3; column 8, lines 10-67) is placed, the processing chamber (4,12, Figure 3; column 8, lines 10-67) being provided with a measurement window (15d, Figure 3; column 1, lines 44-59) formed on a wall of the processing chamber (12, Figure 3; column 8, lines 10-67); exhaustion means ("booster pump"; column 6, lines 6-11) for exhausting inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) via an exhaust port (conduit 12; Figure 3) of the processing chamber (4,12, Figure 3; column 8, lines 10-67) a gas injector (7, Figure 3; column 8, lines 10-67) for injecting a gas into the processing chamber (4,12, Figure 3; column 8, lines 10-67); a plasma generator (not shown; column 2, lines 27-36) for generating plasma in the processing chamber (4,12, Figure 3; column 8, lines 10-67) by application of an electromagnetic wave (column 2; lines 27-36) inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) after the gas has been injected into the processing chamber (4,12, Figure 3; column 8, lines 10-67) by the use of the gas injector (7, Figure 3; column 8, lines 10-67) – claim 5

Tsukazaki further teaches:

- i. Tsukazaki's particle detector unit (15, Figure 3; column 1, lines 44-59) installed outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) detecting light which is scattered from particles (column 3; lines 1-8) passing through the plane while the laser (15a, Figure 3; column 1, lines 44-59) beam passes in the plane and which passes through the measurement window (15d, Figure 3; column 1, lines 44-59); wherein the measurement window (15d, Figure 3; column 1, lines 44-59) is installed on the wall of the processing chamber (12, Figure 3; column 8, lines 10-67) proximate to the exhaust port (conduit 12) and outside of a plasma generation region (above 1) so as to prevent the measurement window (15d, Figure 3; column 1, lines 44-59) from deterioration in detection sensitivity of the light scattered from the particles inside of the processing chamber (12, Figure 3; column 8, lines 10-67), the laser (15a, Figure 3; column 1, lines 44-59) introducing a laser from outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) to inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) through the measurement window (15d, Figure 3; column 1, lines 44-59); Tsukazaki's particle detector unit (15, Figure 3; column 1, lines 44-59) monitors the light scattered from the particle crossing the plane of the processing window (15c; Figure 3; column 1, lines 44-59) and passing outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) through the measurement window (15d, Figure 3; column 1, lines 44-59) - claim 5
- ii. The apparatus of claim 5, wherein the exhaustion means (12; Figure 3 - see above) enables evacuation of the processing chamber (4,12, Figure 3; column 8, lines 10-67), and the plasma generator generates the plasma after the processing chamber (4,12, Figure 3; column 8, lines 10-67) has been evacuated, as claimed by claim 11 - Applicant's claim requirement of

“and the plasma is generated after the processing chamber has been evacuated” is a claim requirement of intended use in the pending apparatus claims. Further, it has been held that claim language that simply specifies an intended use or field of use for the invention generally will not limit the scope of a claim (Walter , 618 F.2d at 769, 205 USPQ at 409; MPEP 2106). Additionally, in apparatus claims, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (In re Casey,152 USPQ 235 (CCPA 1967); In re Otto , 136 USPQ 458, 459 (CCPA 1963); MPEP2111.02).

iii. The apparatus (Figure 3; column 8, lines 10-67) according to claim 5, wherein the laser (15a, Figure 3; column 1, lines 44-59) and the detector (15, Figure 3; column 1, lines 44-59) are arranged at a substantially same position outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) with respect to the measurement window (15d, Figure 3; column 1, lines 44-59) – claim 12

iv. The apparatus (Figure 3; column 8, lines 10-67) according to claim 5, wherein the plane in which the laser (15a, Figure 3; column 1, lines 44-59) beam is scanned inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) is disposed substantially outside of a region (above 1) where the plasma is generated inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67), as claimed by claim 16

Tsukazaki further teaches that Tsukazaki’s particle detector (15, Figure 3; column 1, lines 44-59) transmits a laser (15a, Figure 3; column 1, lines 44-59) beam in a plane inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) which extends in a direction

orthogonal to a direction of exhaust flow within the processing chamber to the exhaust port (conduit 12) - claim 5

Tsukazaki does not teach:

- i. Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59) *scans* a laser (15a, Figure 3; column 1, lines 44-59) beam in a plane inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) - claims 5
- ii. exhaustion means ("booster pump"; column 6, lines 6-11) for exhausting the processing chamber (4,12, Figure 3; column 8, lines 10-67) by a turbo-molecular pump through an exhaust passage coupled to the exhaust port – claim 5
- iii. Tsukazaki's measurement window (15d, Figure 3; column 1, lines 44-59) has a reflection prevention film and a transparent electroconductive film coating, the transparent electroconductive film enabling prevention of the electromagnetic wave (column 2; lines 27-36) inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) from leaking out through the measurement window (15d, Figure 3; column 1, lines 44-59), as claimed by claim 5.
- iv. Likewise, Tsukazaki further does not teach wherein the reflection prevention film is coated on an outside surface of the measurement window (15d, Figure 3; column 1, lines 44-59) upon which the laser (15a, Figure 3; column 1, lines 44-59) is incident from outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67), as claimed by claim 14.
- v. The apparatus (Figure 3; column 8, lines 10-67) according to claim 5, wherein the exhaust passage is equipped with a butterfly valve, as claimed by claim 17.

Gupta teaches a similar apparatus (Figure 1B, 3B) including a scanning (335; Figure 3B) laser system (330, 335; column 8; line 41 – column 9, line 23) for particle detection and processing.

Hamelin teaches a wafer processing system/unit (Figure 2,3) including a vacuum pumping system/unit (280; Figure 2) comprising a mechanical booster vacuum pump, or, equivalently, a turbo-molecular vacuum pump (TMP Figures 2,3; column 9, line 60 – column 10, line 4).

Hamelin further teaches a butterfly valve (not shown; column 9, line 60 – column 10, line 4) constituting his vacuum pumping system/unit (280; Figure 2; column 9, line 60 – column 10, line 4).

Meder teaches a radiation transmission window (25; Figure 1) has a reflection prevention film of indium-tin oxide (column 3; lines 40-50; see applicant's examples [0095]) thereby being a transparent electroconductive film coating enabling prevention of the electromagnetic wave (UV; column 3; lines 40-50) inside of the processing chamber (20, Figure 1) from leaking out through the radiation transmission window (25; Figure 1). When the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent (In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); MPEP 2112.01).

Meder further teaches that the claimed transparent conductive film (column 3; lines 40-50; see applicant's examples [0095]) "being electrically connected to the apparatus (20; Figure 1) so that a potential of the transparent electroconductive film (column 3; lines 40-50; see applicant's examples [0095]) is a same potential as a potential of the apparatus (20; Figure 1)" - claim 5.

The Examiner notes that Figure 1 shows elements 25 and 20 are in contact and are thus at the same potential.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Gupta's laser scanner (335; Figure 3B) to Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59), and for Tsukazaki to replace his exhaustion means ("booster pump"; column 6, lines 6-11) with Hamelin's exhaustion means (280; Figure 2).

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add Meder's reflection prevention film coating to Gupta's measurement window (15d, Figure 3; column 1, lines 44-59) and grounding both Meder's reflection prevention film coating and Gupta's processing chamber (4,12, Figure 3; column 8, lines 10-67).

Motivation to add Gupta's laser scanner (335; Figure 3B) to Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59) is for detecting particles in a concentrated "volume" as taught by Gupta (column 8; lines 26-40), motivation for Tsukazaki to replace his exhaustion means ("booster pump"; column 6, lines 6-11) with Hamelin's exhaustion means (280; Figure 2) is for conducting processing applications that are "low pressure" as taught by Hamelin (column 9; lines 65-68).

Motivation to add Meder's reflection prevention film coating to Gupta's measurement window (15d, Figure 3; column 1, lines 44-59) and grounding both Meder's reflection prevention film coating with Gupta's processing chamber (4,12, Figure 3; column 8, lines 10-67) is for preventing electrostatic discharges from damaging processed wafers as taught by Meder (column 3; lines 40-50).

3. Claims 8, 9, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukazaki; Hisashi et al. (US 5837094 A) in view of Gupta; Anand et al. (US 6125789 A) and Meder; Martin G. (US 6254689 B1). Tsukazaki, Gupta, and Meder are discussed above.

Tsukazaki further teaches a plasma processing unit (Figure 3; column 8, lines 10-67) including a chamber (4,12, Figure 3; column 8, lines 10-67), a plate (2; Figure 3) on which a sample (1, Figure 3; column 8, lines 10-67) is placed, a plasma generator (not shown; column 2, lines 27-36) which generates plasma inside of the chamber by application of an electromagnetic wave (column 2; lines 27-36) inside of the chamber, an exhaustion pump (“booster pump”; column 6, lines 6-11) for exhausting inside of the chamber (12, Figure 3; column 8, lines 10-67) through an exhaust port (conduit 12) of the chamber (12, Figure 3; column 8, lines 10-67), and a measurement window (15d, Figure 3; column 1, lines 44-59) formed on a wall of the chamber (12, Figure 3; column 8, lines 10-67), the measurement window (15d, Figure 3; column 1, lines 44-59) having a surface which is coated with a reflection prevention film and a transparent electroconductive film the transparent electroconductive film enabling prevention of the electromagnetic wave (column 2; lines 27-36) inside the processing chamber (4,12, Figure 3; column 8, lines 10-67) from leaking out through the measurement window (15d, Figure 3; column 1, lines 44-59), the plasma processing unit (Figure 3) being used for processing the sample placed on the plate with plasma generated by the plasma generator (not shown; column 2, lines 27-36) inside of the chamber (12, Figure 3; column 8, lines 10-67) – claim 8.

Tsukazaki further teaches:

- i. Tsukazaki’s particle detector unit (15, Figure 3; column 1, lines 44-59) installed outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) detecting light which is scattered from a particle (column 3; lines 1-8), the laser (15a, Figure 3; column 1, lines 44-59) introducing a laser from outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) to inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) through the

measurement window (15d, Figure 3; column 1, lines 44-59); Tsukazaki's particle detector unit (15, Figure 3; column 1, lines 44-59) monitors the light scattered from the particle crossing the plane of the processing window (15c; Figure 3; column 1, lines 44-59) and passing outside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) through the measurement window (15d, Figure 3; column 1, lines 44-59) - claim 8

- ii. A plasma processing apparatus (Figure 3; column 8, lines 10-67) control system (31, Figure 3) comprising: a plasma processing unit (Figure 3; column 8, lines 10-67) including a chamber (4,12, Figure 3; column 8, lines 10-67), a plate (2, Figure 3) on which a sample (1, Figure 3; column 8, lines 10-67) is placed, a plasma generator (not shown; column 2, lines 27-36), and a measurement window (15d, Figure 3; column 1, lines 44-59) formed on a wall (12, Figure 3; column 8, lines 10-67) of the chamber (4,12, Figure 3; column 8, lines 10-67), the processing unit (Figure 3; column 8, lines 10-67) being used for processing the sample (1, Figure 3; column 8, lines 10-67) placed on the plate (2, Figure 3) with the plasma generated by the plasma generator (not shown; column 2, lines 27-36) inside the chamber (4,12, Figure 3; column 8, lines 10-67); and a controller unit (31, Figure 3) for receiving a signal output from the processing unit (Figure 3; column 8, lines 10-67) and a detection signal from the particle detecting unit (15, Figure 3; column 1, lines 44-59) to control the processing unit (Figure 3; column 8, lines 10-67) and to monitor a state of contaminants inside the chamber (column 7; lines 31-67) - claim 8
- iii. Tsukazaki's measurement window (15d, Figure 3; column 1, lines 44-59) which is installed on the wall of the chamber (4,12, Figure 3; column 8, lines 10-67) proximate to the exhaust port (conduit 12) and outside of a region (above 1) where the plasma is generated by the plasma

generator (not shown; column 2, lines 27-36) to prevent the measurement window (15d, Figure 3; column 1, lines 44-59) from deterioration in detection sensitivity of the light scattered from the particles inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) – claim 8. When the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent (In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); MPEP 2112.01).

- iv. The plasma processing apparatus (Figure 3; column 8, lines 10-67) according to claim 8, wherein the controlling unit (31, Figure 3) compares the output signal (“end point”; column 5, lines 56-64; column 7, lines 31-40) from the processing unit (Figure 3; column 8, lines 10-67) with the detection signal by the particle detecting unit (15, Figure 3; column 1, lines 44-59) to identify a contaminant source (column 7; lines 31-67) in the processing apparatus (Figure 3; column 8, lines 10-67), as claimed by claim 9
- v. The plasma processing apparatus (Figure 3; column 8, lines 10-67) according to claim 8, wherein the particle detecting unit (15, Figure 3; column 1, lines 44-59) includes a laser (15a, Figure 3; column 1, lines 44-59) introduce the laser beam and a detector which which detects the scattered light and which are arranged at a substantially same position outside of the chamber (4,12, Figure 3; column 8, lines 10-67) with respect to the measurement window (15d, Figure 3; column 1, lines 44-59) – claim 13

Tsukazaki further teaches that Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59) transmitts a laser (15a, Figure 3; column 1, lines 44-59) beam in a plane which extends in a direction which is orthogonal to an exhaust flow direction (along conduit 12) inside of the chamber (4,12, Figure 3; column 8, lines 10-67) to the exhaust port - claims 8, 13

Tsukazaki does not teach

- i. Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59) scans a laser (15a, Figure 3; column 1, lines 44-59) beam - claims 8, 13
- ii. The plasma processing apparatus (Figure 3; column 8, lines 10-67) according to claim 8, wherein the plane in which the laser (15a, Figure 3; column 1, lines 44-59) beam is applied is inside of the chamber (4,12, Figure 3; column 8, lines 10-67) is substantially outside of a region (above 1) where the plasma is generated inside of the chamber (4,12, Figure 3; column 8, lines 10-67) – claim 19

Gupta teaches a similar apparatus (Figure 1B, 3B) including a scanning (335; Figure 3B) laser system (330, 335; column 8; line 41 – column 9, line 23) for particle detection and processing.

Meder teaches a radiation transmission window (25; Figure 1) has a reflection prevention film of indium-tin oxide (column 3; lines 40-50; see applicant's examples [0095]) thereby being a transparent electroconductive film coating enabling prevention of the electromagnetic wave (UV; column 3; lines 40-50) inside of the processing chamber (20, Figure 1) from leaking out through the radiation transmission window (25; Figure 1). When the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent (In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); MPEP 2112.01).

Meder further teaches that the claimed transparent conductive film (column 3; lines 40-50; see applicant's examples [0095]) "being electrically connected to the apparatus (20; Figure 1) so that a potential of the transparent electroconductive film (column 3; lines 40-50; see applicant's examples [0095]) is a same potential as a potential of the apparatus (20; Figure 1) " - claim 8.

The Examiner notes that Figure 1 shows elements 25 and 20 are in contact and are thus at the same potential.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Gupta's laser scanner (335; Figure 3B) to Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59).

Motivation to add Gupta's laser scanner (335; Figure 3B) to Tsukazaki's particle detector (15, Figure 3; column 1, lines 44-59) is for detecting particles in a concentrated "volume" as taught by Gupta (column 8; lines 26-40).

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add Meder's reflection prevention film coating to Gupta's measurement window (15d, Figure 3; column 1, lines 44-59) and grounding both Meder's reflection prevention film coating and Gupta's processing chamber (4,12, Figure 3; column 8, lines 10-67).

Motivation to add Meder's reflection prevention film coating to Gupta's measurement window (15d, Figure 3; column 1, lines 44-59) and grounding both Meder's reflection prevention film coating with Gupta's processing chamber (4,12, Figure 3; column 8, lines 10-67) is for preventing electrostatic discharges from damaging processed wafers as taught by Meder (column 3; lines 40-50).

Response to Arguments

4. Applicant's arguments filed December 12, 2008 have been fully considered but they are not persuasive.

5. Applicant states:

“

In applying the cited art to the claimed invention, the Examiner sets forth the deficiencies of each of the references. More particularly, the Examiner at the middle of page 6 of the Office Action states:

None of Tsukazaki, Gupta, Hamelin and Meder teach that the claimed transparent conductive film and the plasma processing apparatus "have a same potential applied thereto" as claimed by claim 20. (emphasis added).

Similarly at the bottom of page 11 of the Office Action, the Examiner states:

None of Tsukazaki, Gupta, and Meder teach that the claimed transparent film and the plasma processing apparatus "have a same potential applied thereto" as claimed by claim 21. (emphasis added)

As noted above, the features of claims 20 and 21 have been incorporated into independent claims 5 and 8, respectively, while additionally reciting the feature of the electrical connection of the transparent conductive film and the plasma processing apparatus.

“

In response, the Examiner believes that the now cancelled claims 20 and 21 and the now amended portions of claims 5 and 8 *are not equivalent in scope*. Cancelled claims 20 and 21 required in part "a same potential *applied* thereto" implying an outside *source* of power/current *maintaining* said potential. The corresponding portion of amended claims 5 and 8 *do not* imply an additional source of potential and simply requires that the apparatus and the electroconductive film are at the same potential.

Applicant states:

“

Applicants submit that the Examiner has mischaracterized the cited decision and the manual provision, and contrary to the Examiner's position, the cited art does not provide the structure or function of the present invention, other than by a hindsight reconstruction attempt, which reconstruction attempt also fails to provide such features.

“

And...

“

As noted above, the Examiner has engaged in hindsight reconstruction attempt and none of the cited art, as recognized by the Examiner, discloses the structure or function as recited. Thus, while the Examiner contends that it would be obvious to combine the cited art to provide the claimed features, applicants submit that contrary to the Examiner's position the cited art cannot be properly combined and cannot be properly combined to provide the recited features. Accordingly, all claims should be considered allowable thereover.

“

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209.

Applicant states:

“

Thus, Meder, like the other cited art, does not disclose or teach an electroconductive film which prevents leakage of an electromagnetic wave utilized for generatin plasma within the chamber from leaking out from the chamber through the measurement window, as recited in claims 5 and 8, and the dependent claims of this application.

“

In response, the Examiner's maintained position is that Tsukazaki does not teach Tsukazaki's measurement window (15d, Figure 3; column 1, lines 44-59) has a reflection prevention film and a transparent electroconductive film coating, the transparent electroconductive film enabling prevention of the electromagnetic wave (column 2; lines 27-36) inside of the processing chamber (4,12, Figure 3; column 8, lines 10-67) from leaking out through the measurement window (15d, Figure 3; column 1, lines 44-59).

Reassesing Meder, it is again concluded that Meder teaches a radiation transmission window (25; Figure 1) with a reflection prevention film of indium-tin oxide (column 3; lines 40-50; see applicant's examples [0095]). Because Meder's film is chemically identical to Applicant's own indium-tin oxide example (see applicant's examples [0095]) it must perform as intended by Applicant thereby being a transparent electroconductive film coating enabling prevention of the electromagnetic wave (UV; column 3; lines 40-50) inside of the processing chamber (20, Figure 1) from leaking out through the radiation transmission window (25; Figure 1). When the structure recited in the reference is substantially identical to that of the claims, claimed properties

or functions are presumed to be inherent (In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); MPEP 2112.01).

Conclusion

6. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Rudy Zervigon whose telephone number is (571) 272-1442. The examiner can normally be reached on a Monday through Friday schedule from 9am through 5pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Chemical and Materials Engineering art unit receptionist at (571) 272-1700. If the examiner can not be reached please contact the examiner's supervisor, Parviz Hassanzadeh, at (571) 272- 1435

Application/Control Number:
10/790,180
Art Unit: 1792

Page 17

/Rudy Zervigon/

Primary Examiner, Art Unit 1792